

*Migrations of Danais Archippus.*

*To the Editors of the Annals and Magazine of Natural History.*

Altona, October 15, 1873.

GENTLEMEN,—In the June and August numbers of the 'Annals' are two letters from Professor F. M'Coy regarding the sudden appearance of *Danais Archippus* in Australia. I beg to state that I have just published, in the fourth part of the 'Journal des Museum Godeffroy' (Hamburg, L. Friederichsen & Co.), all the facts known to me on the wandering of this American butterfly over the islands of the Pacific Ocean, and the continent of Australia, to Gorontalo on North Celebes, where Dr. A. B. Meyer captured four specimens of *Danais Archippus*—three of which are at the Berlin Museum, and one in my collection.

GEORG SEMPER.

*On the Change of Form of the Lachrymal Pit during Growth in the Skulls of the Bush-boks (Cephalophus) and Muntjacs (Cervulus).*  
By Dr. J. E. GRAY, F.R.S.

The lachrymal pit is large, rounded, deep, and well developed in the adult bush-boks; and the characters afforded by these parts have generally been considered important for the separation of the genera and species of the bush-boks and other antelopes; but care should be taken to compare skulls (at least of the species of bush-boks) of nearly the same age. The lachrymal pit of *Cephalophus rufilatus*, *C. badius*, and *C. coronatus* is large and deep in the adult skull; but in the younger skulls it is smaller and shallower, being least marked of all in the young specimens. It is very slightly marked in the skull of *C. Whitfieldii* and *C. bicolor*, which are only known from very young specimens, and of which we do not know the adult; but the skull will very probably be like that of the adult of other bush-boks.

I think we may conclude, from these facts, that the tear-pit in this genus is small and shallow in the young, and increases in size, form, and depth as the animal approaches the adult age. The variation is so great that it is only safe to compare the skulls of different species of the same or nearly the same age.

The size of the intermaxillary bone appears to be generally a good character, and not influenced by age; but sometimes it varies in extent in different specimens of the same species. In three specimens of *Cephalophus Ogilbyi*, for example, the intermaxillary bone does not reach the edge of the nasal; but in one specimen the intermaxillary bone is very large, and is margined above by the nasal (Hand-list of Ruminants, t. xxxiii. f. 2). The size of the orbit seems to be pretty permanent in the skulls of the different species.

I have not had the opportunity of observing this change in the skulls of the other genera of antelopes and the allied animals. Perhaps it is not so great as in this group.